# Contents

#### Cocona (Solanum sessiliflorum Dunal)

- O Duarte, National Agrarian University, La Molina, Peru
- Introduction
- Fruit development and postharvest physiology
- Maturity and quality components and indices
- Preharvest factors affecting quality
- Postharvest factors affecting quality
- Physiological disorders
- Pathological disorders
- Insect pests and their control
- Postharvest handling practices
- Processing
- Conclusions
- References

# Coconut (Cocos nucifera L.)

J Siriphanich, P Saradhuldhat, T Romphophak, K Krisanapook, S Pathaveerat and S Tongchitpakdee, Kasetsart University, Thailand

- Introduction
- Fruit biology and postharvest physiology
- Quality components and maturity indices
- Preharvest factors affecting quality
- Postharvest handling factors affecting quality
- Physiological disorders and pests
- Postharvest handling practices
- Processing
- Conclusions
- Acknowledgements
- References

#### Dabai (Canarium odontophyllum Miq.)

- P Ding, University of Putra Malaysia, Malaysia
- Introduction
- Postharvest physiology
- Harvesting
- Maturity and quality components and indices
- Postharvest handling factors affecting quality
- Conclusions
- References

#### Date (Phoenix dactylifera L.)

*E M Yahia, Autonomous University of Queretaro, Mexico and A A Kader, University of California, Davis, USA* 

- Introduction
- Fruit growth and development
- Nutritional components and health benefits
- Postharvest physiology
- Maturity and quality indices
- Preharvest factors affecting postharvest fruit quality
- Postharvest handling factors affecting quality
- Physiological disorders
- Pathological disorders
- Insect pests and their control
- Postharvest handling practices

- Processing
- Food safety considerations
- Conclusions
- References

# Durian (Durio zibethenus Merr.)

- J Siriphanich, Kasetsart University, Thailand
- Introduction
- Fruit development and postharvest physiology
- Maturity and quality components and indices
- Preharvest factors affecting fruit quality
- Postharvest handling factors affecting quality
- Physiological disorders
- Pathological disorders
- Insect pests and their control
- Postharvest handling practices
- Processing
- Conclusions
- Acknowledgements
- References

#### Feijoa (Acca sellowiana [Berg] Burret)

W C Schotsmans, Institute of Agricultural Research and Technology, Spain, A East, Massey University, New Zealand, G Thorp and A B Woolf, The New Zealand Institute for Plant & Food Research Limited, New Zealand

- Introduction
- Preharvest factors affecting fruit quality
- Postharvest physiology and quality
- Postharvest handling factors affecting quality
- Postharvest crop losses
- Processing
- Conclusions
- References

# Fig (Ficus carica L.)

*H Crisosto and V Bremer, University of California, Davis, E Stover, US Horticultural Research Laboratory, USA and G Colelli, University of Foggia, Italy* 

- Introduction
- Fruit development and postharvest physiology
- Maturity and quality components and indices
- Preharvest factors affecting fruit quality
- Postharvest handling factors affecting quality
- Physiological disorders
- Pathological disorders
- Insect pests and their control
- Postharvest handling practices
- Processing
- Conclusions
- References

#### Golden apple (Spondias dulcis Forst. syn. Spondias cytherea Sonn.)

M Mohammed, University of the West Indies St Augustine Campus, Trinidad, SHajar Ahmad, R Abu Bakar and T Lee Abdullah, University of Putra Malaysia, Malaysia

- Introduction
- Fruit development and postharvest physiology
- Maturity indices and quality components

- Preharvest factors affecting fruit quality
- Postharvest handling factors affecting quality
- Physiological disorders
- Pathological disorders
- Insect pests and control
- Postharvest handling practices
- Processing
- Conclusions
- References

# Table grape (Vitis vinifera L.)

J P Zoffoli and B A Latorre, Pontificia Universidad Católica de Chile, Chile

- Introduction
- Table grape cultivars
- Fruit anatomy
- Physiology of berry growth and maturation
- Deterioration factors
- Postharvest handling and packaging
- Temperature management
- Sulfur dioxide treatments
- Quarantine treatments
- Transport
- Processing
- Conclusions
- References

# Guava (Psidium guajava L.)

S P Singh, Curtin University of Technology, Australia

- Introduction
- Fruit development and postharvest physiology
- Maturity indices
- Preharvest factors affecting fruit quality
- Postharvest handling factors affecting fruit quality
- Physiological disorders
- Postharvest pathological disorders
- Postharvest insect-pests and phytosanitary treatments
- Postharvest handling practices
- Processing
- Conclusions
- Acknowledgements
- References

#### Jaboticaba (Myrciaria cauliflora (Mart.) O.Berg. [Myrtaceae])

*G H de Almeida Teixeira, The University of São Paulo (USP), M F Berlingieri Durigan, Embrapa Roraima, Brazil and J F Durigan, Universidade Estadual Paulista, Brazil* 

- Introduction
- Fruit development and postharvest physiology
- Maturity and quality components and indices
- Preharvest factors affecting fruit quality
- Postharvest handling factors affecting quality
- Physiological disorders
- Pathological disorders
- Insect pests
- Postharvest handling practices
- Processing

- Conclusions
- References

#### Jackfruit (Artocarpus heterophyllus Lam.)

A Saxena, A S Bawa and P S Raju, Defence Food Research Laboratory, India

- Introduction
- Fruit growth, respiratory behaviour and ripening
- Jackfruit composition and nutritional value
- Preharvest factors affecting fruit quality and harvest timing
- Postharvest handling practices
- Pathological disorders and insect pests
- Processing
- Conclusions
- References

# Chinese Jujube (Ziziphus jujuba Mill.) and Indian Jujube (Ziziphus mauritiana Lam.)

- J P Sheng and L Shen, China Agricultural University, China
- Introduction
- Ripening behaviour and postharvest physiology
- Postharvest pathology and entomology
- Postharvest disorders
- Preharvest treatments to extend shelf life
- Postharvest treatments to extend shelf-life
- Postharvest handling
- Processing
- References

#### Kiwifruit (Actinidia spp.)

J Burdon and N Lallu, The New Zealand Institute for Plant & Food Research Ltd, New Zealand

- Introduction
- The Actinidia vine and fruit
- Maturation
- Postharvest physiology
- Physiological disorders
- Postharvest pathology
- Postharvest handling
- Commercial practice
- Future trends
- Acknowledgements
- References

#### Litchi (Litchi chinensis Sonn.)

*D Sivakumar, Tshwane University of Technology and L Korsten, University of Pretoria, South Africa* 

- Introduction
- Fruit development, maturation and composition
- Production of good quality litchi fruits for postharvest export chain
- Constraints during long-term storage and export
- Postharvest picking, in-field sorting and transport
- Postharvest chain and packhouse treatments
- Developments in postharvest technologies to replace sulphur dioxide fumigation
- Processing
- Conclusions
- References

### Longan (Dimocarpus longan Lour.)

*Y Jiang, Chinese Academy of Sciences, China, D Joyce, University of Queensland, Australia and H Lin, Fujian Agriculture and Forestry University, China* 

- Introduction
- Postharvest characteristics
- Postharvest handling
- Packaging
- Storage
- Transport
- Marketing
- Processing
- Conclusions
- Acknowledgements
- References

#### Loquat (Eriobotrya japonica L.)

- S Tian, G Qin and B Li, Chinese Academy of Sciences, China
- Introduction
- Maturity and quality
- Postharvest physiology
- Physiological disorders
- Postharvest diseases
- Postharvest treatments
- Storage technologies
- Conclusions
- References

# Lucuma (Pouteria lucuma (Ruiz & Pav.) Kuntze)

- E M Yahia and F Guttierrez-Orozco, Autonomous University of Queretaro, Mexico
- Introduction
- Fruit development and postharvest physiology
- Maturity and quality components and indices
- Postharvest handling factors affecting quality
- Physiological disorders
- Insect pests and their control
- Postharvest handling practices
- Processing
- Conclusions
- References

#### Macadamia (Macadamia integrifolia, Macadamia tetraphylla and hybrids)

H M Wallace and D A Walton, University of the Sunshine Coast, Australia

- Introduction
- Preharvest physiology
- Quality components and indices
- Preharvest factors affecting nut quality
- Quality and the on-farm postharvest chain
- Drying effects on quality
- Handling and physical damage to macadamia
- Factory processing of macadamia
- Conclusions
- References

#### Mamey apple (Mammea americana L.)

E M Yahia and F Guttierrez-Orozco, Autonomous University of Queretaro, Mexico

- Introduction

- Fruit development and postharvest physiology
- Maturity and quality components and indices
- Postharvest handling factors affecting quality
- Physiological disorders
- Pathological disorders
- Insect pests
- Postharvest handling practices
- Processing
- Conclusions
- References

#### Mamey sapote (Pouteria sapota Jacq. H. E. Moore & Stearn)

- E M Yahia and F Guttierrez-Orozco, Autonomous University of Queretaro, Mexico
- Introduction
- Postharvest physiology
- Maturity and quality components and indices
- Postharvest handling factors affecting quality
- Physiological disorders
- Pathological disorders
- Insect pests and their control
- Postharvest handling practices
- Processing
- Conclusions
- References

#### Mango (Mangifera indica L.)

E M Yahia, Autonomous University of Queretaro, Mexico

- Introduction
- Fruit development and postharvest physiology
- Maturity and quality components and indices
- Preharvest factors affecting fruit quality
- Postharvest handling factors affecting quality
- Physiological disorders
- Pathological disorders and their control
- Insect pests and their control
- Postharvest handling practices
- Processing
- Conclusions
- References